10/681,086

February 26, 2007

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**AMENDMENTS TO THE CLAIMS** 

**LISTING OF CLAIMS:** 

Claims 1-22 (cancelled).

Claim 23 (currently amended): A process for decoupling production of a

target fermentation product from biomass production in a fermentation medium

comprising:

(a) providing a recombinantly produced microorganism from the genus

Bacillus that has been engineered to contain a polynucleotide sequence which encodes

biosynthetic enzymes for said target fermentation product,

(b) introducing a mutation causing a biotin auxotrophy into the

microorganism to control biomass production and which does not compromise the

ability of the microorganism to produce said target fermentation product, and

(c) supplying the medium with an unlimited amount of substrates required

for the production of said target fermentation product and with a limited amount of biotin

complementing the auxotrophy;

wherein said target fermentation product is selected from the group

consisting of riboflavin, pantothenic acid, thiamin, folic acid, and pyridoxine.

Claim 24 (previously presented): A process according to claim 23 wherein

step (b) comprises introducing a polynucleotide comprising a deletion-insertion mutation

into the genome of the microorganism to disrupt the microorganism's ability to produce

biotin.

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A process according to claim 24 wherein the Claim 25 (original): polynucleotide comprises deletion-insertion mutations within a bioFDB gene cassette.

Claim 26 (original): A process according to claim 23 wherein the introducing step comprises transforming the microorganism with a polynucleotide sequence comprising a bioFDB deletion-insertion mutation.

Claim 27 (original): A process according to claim 26 comprising transforming the microorganism with a polynucleotide sequence comprising SEQ ID NO:1.

Claim 28 (original): A process according to claim 27 further comprising selecting for transformation of the microorganism.

Claim 29 (original): A process according to claim 28 wherein selecting for the transformation comprises selecting for antibiotic resistance.

Claim 30 (original): A process according to claim 29 wherein selecting for the transformation comprises selecting for neomycin resistance.

Claim 31 (cancelled).

Claim 32 (original): A production microorganism made by the process of claim 23.

Claims 33-40 (cancelled).